

Redesigning Cardiometabolic Patient Care

The Role of Change Management in Accelerating Multidisciplinary Innovation

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Table of Contents

03 **Executive Summary**

04 **Challenge**

06 **Solution**

STRONG-HF Early Adopters Program

How Roche Consulting Enables Transformation

09 **Proven DMC Methodology**

11 **180 Days of STRONG-HF**

12 **Customer Testimonial**

13 **Call to Action**

14 **References**

1.Executive Summary



Healthcare systems globally face a persistent challenge: translating rapidly evolving clinical evidence into consistent and effective real-world clinical practice.¹ Despite major therapeutic advances in cardiometabolic medicine, a significant **evidence-practice gap** remains, limiting the population-level benefits of guideline-directed care.^{2,3}

This challenge is particularly visible in **Heart Failure** management. HF is one of the leading causes of hospitalization and healthcare expenditure worldwide, and outcomes remain suboptimal.^{4,5} Patients discharged after hospitalization for **Acute Heart Failure (AHF)** experience high risks of early rehospitalisation and mortality, particularly during the vulnerable early post-discharge period.¹¹

Bridging this gap requires healthcare organizations to go beyond traditional clinical guideline dissemination. Many hospitals have found that **structured frameworks rooted in implementation science** help to efficiently transform workflows, align multidisciplinary teams and embed evidence-based interventions into routine clinical care.⁶

Roche Consulting aims to support hospitals worldwide* in this effort with its **Disease Management Consulting (DMC)** approach. By combining clinical expertise, change-management methodologies, and operational redesign, RC helps healthcare institutions translate scientific evidence into scalable care pathways.

One example of this transformation is the implementation of **STRONG-HF (Safety, Tolerability and efficacy of Rapid Optimization, helped by NT-proBNP testing, of Heart Failure therapies)**. The STRONG-HF trial demonstrated that **rapid optimization of guideline-directed medical therapy (GDMT)** combined with structured early follow-up significantly improves outcomes in Heart Failure patients.⁷

Clinical results demonstrate:

- **Significant 34% risk reduction of HF readmission or all-cause mortality at 180 days**
- **Approximately 44% (180 days) and 33% (90 days) reduction in HF rehospitalisations**

These results illustrate the transformative potential of structured post-discharge care pathways supported by multidisciplinary collaboration and biomarker-guided monitoring.

Hospitals implementing STRONG-HF-inspired care models may:

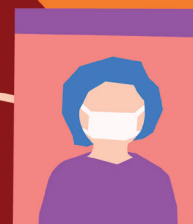
- Accelerate access to optimal therapy including the four pillars of GDMT
- Reduce variation in clinical practice
- Improve patient outcomes and experience
- Enhance operational efficiency across care pathways

2.Challenges

The post-discharge period for patients with Heart Failure represents a particularly vulnerable phase in the care continuum, characterized by elevated risks of mortality and hospital readmission.⁸ While evidence-based, structured care pathways, such as STRONG-HF and New Zealand's Accelerated Treatment Pathway (ATP), have demonstrated meaningful improvements in both clinical and health system outcomes, their adoption in routine practice remains inconsistent.^{9,10}

The effective management of Heart Failure during this period is further complicated by the involvement of multiple care settings, fragmented funding structures, and the high prevalence of cardiometabolic comorbidities, including Type 2 Diabetes and coronary artery disease.¹⁹ Collectively, these factors position post-discharge Heart Failure management as a significant public health challenge, requiring a coordinated, integrated and system-level approach to care delivery.²⁰





Vulnerable Post-Discharge Period

The period immediately following hospital discharge for patients with Heart Failure represents one of **the most clinically vulnerable phases** in the care continuum. During the first weeks after discharge, patients are exposed to **significantly elevated risks** of clinical deterioration, suboptimal adherence to prescribed therapies, unplanned hospital readmissions, and early mortality.^{11,12,13} These risks are often exacerbated by incomplete optimization of guideline-directed medical therapy prior to discharge, insufficiently structured follow-up, and gaps in care continuity.¹⁴ As a result, the transition from hospital to community care remains a critical point of failure within current HF management models.

Low Real-World Adoption

Despite robust clinical evidence supporting guideline-directed medical therapy and structured post-discharge care pathways, real-world adoption remains inconsistent and, in many settings, suboptimal.^{1,15} Healthcare systems frequently encounter challenges in translating evidence-based recommendations into standardized and operational clinical practice. Key barriers include organizational silos between inpatient and outpatient services, limited capacity for proactive follow-up, absence of standardized protocols for therapy initiation and titration and insufficient multidisciplinary integration.^{16,26} Consequently, the benefits demonstrated in clinical trials are not consistently realized at the population level.^{17,18}

Management Across Settings

Heart failure management inherently spans multiple care environments, including acute hospital services, specialist outpatient clinics, primary care networks and community-based providers.^{24,22} Each of these settings typically operates within distinct governance frameworks, funding mechanisms and clinical workflows. This fragmentation complicates care coordination, delays therapeutic optimization, and increases the likelihood of communication gaps between providers. The absence of fully integrated care pathways undermines continuity of care and contributes to variability in patient outcomes.

Public Health Issue

Heart failure constitutes a substantial and growing burden on healthcare systems, driven by high rates of hospitalization, chronic disease progression and associated comorbidities.⁵ Addressing deficiencies in post-discharge management is therefore a critical public health priority. National and international cardiovascular bodies have increasingly emphasized the need to improve access to guideline-directed HF care and align clinical practice with established best standards.²¹ However, disparities in access to evidence-based therapies, structured follow-up programs, and healthcare change management and implementation resources persist across regions, contributing to inequities in clinical outcomes and overall system inefficiencies.^{2,3,23}

Complexity Due to Comorbidities

The management of heart failure is further complicated by the high prevalence of coexisting cardiometabolic conditions, most notably Type 2 Diabetes, Coronary Artery Disease, and Chronic Kidney Disease.¹⁹ These comorbidities not only increase clinical complexity but also necessitate a more comprehensive and integrated approach to patient care. Effective management requires coordinated, multidisciplinary strategies that address the full spectrum of cardiometabolic risk, rather than isolated disease-specific interventions.²⁰

3. Solution

Addressing the gaps in post-discharge Heart Failure management requires a fundamental redesign of care delivery models. Moving beyond fragmented and reactive clinical workflows, healthcare systems must adopt structured, proactive care pathways that enable early intervention, continuous monitoring and consistent application of evidence-based therapies across the patient journey.^{21,22}

Such transformation is inherently complex, requiring alignment across clinical disciplines, care settings and organizational structures. As a result, successful implementation depends not only on clinical innovation, but also on effective change management, cross-functional collaboration, and where appropriate, the integration of external expertise to accelerate adoption and ensure sustainability.²³

Cross-Setting Management

Effective post-discharge management of Heart Failure must be designed to operate seamlessly across multiple clinical settings, including hospital care, outpatient services and community-based support. This requires coordinated care pathways that transcend traditional organizational and budgetary boundaries.²²

Core elements of such pathways include:

- Early multidisciplinary follow-up after discharge
- Rapid optimization of guideline-directed medical therapy
- Continuous monitoring of patient clinical status
- Standardized clinical decision-support tools

Together, these elements enable more consistent, timely and proactive care delivery across the continuum.

Cardiometabolic Transformation as a Cross-Functional Initiative

Heart Failure management must be approached within the broader context of cardiometabolic care, requiring close collaboration across clinical and operational disciplines. This includes cardiologists, internal medicine specialists, specialist Heart Failure nurses, pharmacists, laboratory services and hospital administrators.²⁴

Only through coordinated governance and clearly defined roles can integrated care pathways be effectively implemented and sustained. This cross-functional alignment is essential to ensure that care delivery reflects the full complexity of patient needs rather than isolated disease-specific interventions.

Change Management as a Catalyst

Sustainable transformation of care delivery models requires structured and deliberate change-management strategies. Engaging clinical leadership and aligning stakeholders across departments are critical to embedding new practices into routine care.⁶

Successful transformation programs typically include:

- Multidisciplinary leadership teams
- Standardized clinical protocols and pathways
- Data-driven monitoring of clinical and operational outcomes
- Mechanisms for continuous process improvement

Without these foundational components, even well-designed care models risk limited adoption and reduced long-term impact.

The Role of External Expertise

In settings where internal resources or implementation capabilities are limited, external partners can play a critical role in accelerating transformation.²⁵ Structured support models, such as Disease Management Consulting (DMC) frameworks, provide healthcare organizations with the methodologies, tools, and expertise required to implement evidence-based care pathways effectively.

By leveraging external expertise, organizations can:

- Accelerate time to implementation
- Enhance consistency and standardization of care
- Strengthen internal capabilities through knowledge transfer
- Improve the likelihood of achieving sustainable clinical and operational outcomes

3.1.STRONG-HF Early Adopters Program



The STRONG-HF Early Adopters Program has been established to support hospitals and health systems in the implementation of evidence-based post-discharge Heart Failure care pathways. Building on insights from the STRONG-HF clinical protocol, the program is designed to facilitate the translation of clinical evidence into routine practice, with the objective of reducing unwarranted variation in care delivery and accelerating the adoption of guideline-directed medical therapy.⁷

The program provides a structured approach to implementation, supporting participating institutions in adapting care models to their local context while maintaining alignment with established clinical standards.

Key elements of the program include:

- Structured implementation guidance tailored to institutional needs
- Facilitation of multidisciplinary collaboration across clinical teams
- Knowledge exchange between participating early adopter sites
- Access to implementation science expertise and best practices

At its core, the program promotes an integrated model of care that emphasizes:

- Early multidisciplinary follow-up after hospital discharge
- Rapid optimization of guideline-directed medical therapy (GDMT)
- Biomarker-guided treatment strategies
- Standardized safety monitoring and follow-up protocols

Emerging experience from participating institutions indicates improvements in both clinical outcomes and operational performance, suggesting that structured implementation approaches may play a critical role in closing the gap between clinical evidence and real-world practice.²⁶

3.2. How Roche Consulting Enables Transformation

As a key external partner of the STRONG-HF Early Adopter Program, Roche Consulting supports healthcare institutions in implementing integrated cardiometabolic care pathways through a structured, implementation-focused approach.²⁵ Working in collaboration with clinical and operational stakeholders, Roche Consulting facilitates the translation of evidence-based innovations into routine practice.

The approach Roche Consulting uses is called Disease Management Consulting (DMC) and its core components include:

- Application of implementation science methodologies
- Stakeholder engagement frameworks to align clinical and administrative leadership
- Data-driven pathway redesign
- Operational transformation support to embed new practices into routine care

The DMC approach has been applied across multiple healthcare systems, supporting adaptation to diverse organizational and funding environments, including: United Kingdom, The Netherlands, New Zealand, the United States and many more.^{16,20,21}

In addition, Roche Consulting facilitates knowledge exchange between institutions that have implemented similar transformation initiatives in a consortium called STRONG-HF Alliance. By connecting healthcare providers with peers who have practical implementation experience, organizations can benefit from shared learnings and accelerate adoption of best practices.



4. Proven DMC Methodology

Delivering sustainable transformation in cardiometabolic care requires more than clinical insight—it demands a structured, repeatable implementation model that translates strategy into operational reality within a defined and measurable timeframe.

Roche Consulting's Disease Management Consulting (DMC) methodology provides a **phased, evidence-based framework**, typically initiated and operationalized within **a focused engagement cycle of weeks, not months**, enabling rapid progression from assessment to implementation.²⁵

The methodology is structured around three core phases:

1. Understanding the Current State (Insights Framework)

The transformation journey begins with a targeted diagnostic phase, built on **concise, high-impact stakeholder engagement**. This typically includes **short structured interviews** with key clinical and operational leaders, designed to rapidly assess existing care pathways, identify critical gaps, and establish alignment across decision-makers.

Even within this short timeframe, organizations gain a **clear, data-informed baseline** to guide transformation priorities.

2. Designing the Future State (Patient Journey Mapping)

Following the initial assessment, multidisciplinary teams participate in a **focused design phase** structured around **two half-day workshops**. The first workshop is dedicated to current state validation, while the second focuses on future state creation, validation, and readiness in collaboration with consulting and project leadership teams.

This phase enables:

- Visualization of current and creation of future patient pathways
- Identification of inefficiencies and variation across the care continuum
- Development of a **pragmatic, implementation-ready transformation roadmap**

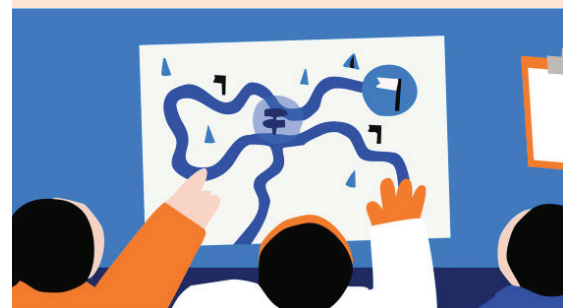
3. Implementation and Continuous Improvement (IMPACT Framework)

The final phase translates strategy into action through a **structured implementation and validation process**, building on the future state creation and validation workshop described above. This is followed by a dedicated **"hypercare" period**, during which:

- Performance indicators are continuously monitored
- Regular check-ins ensure adherence and rapid issue resolution
- Early results are evaluated and optimized in real time

This phase ensures that transformation is not only executed, **but embedded sustainably into routine clinical practice**.

Across all three phases, the DMC methodology emphasizes **speed, alignment, and measurable impact**, enabling healthcare organizations to move from initial insight to operational change within a **clearly defined and accelerated timeframe**.



DMC Approach

Insights Framework

Understand the current state



Process



Virtual/face-to-face structured interviews with key stakeholders from multidisciplinary teams

Value

- Define current diagnostic pathway
- Identify specific gaps and opportunities to prioritize
- Build consensus to drive change
- **Outcome:**
Insights Framework Report

Patient Journey Mapping

Collectively plan the future state



Virtual mapping exercise as preparation

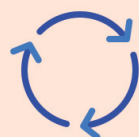


Face to face patient journey validation / ideation workshop

- Validate current patient/ diagnostic pathway
- Identify inefficiencies in the diagnostic pathway
- **Outcome:**
Co-created Future-State Patient/ Diagnostic Pathway

IMPACT Framework

Go live with designed plan and monitor



Hypercare: supports plan execution with regular check-ins throughout the change process.



Checkpoints

- Create implementation plan to achieve future-state
- Set roles, responsibilities & KPIs
- Enable hypercare ways of working
- **Outcome:**
New Patient/Diagnostic Pathway Implemented

5. 180 Days of STRONG-HF

Deep Dive into the STRONG-HF trial

The STRONG-HF trial provides a clinically validated framework for transforming post-discharge Heart Failure management, demonstrating how **early, intensive intervention combined with structured monitoring** can significantly improve patient outcomes. As a result of the STRONG HF trial **ESC updated its recommendations in 2023** for high-intensity care for initiation and rapid up-titration of oral HF therapies and close follow-up in the first 6 weeks after discharge for an acute HF hospitalization is recommended to reduce HF readmission and all-cause death.⁷

At the core of this approach is the use of **biomarker-guided therapy**, particularly NT-proBNP, to support clinical decision-making and ensure safe, rapid optimization of guideline-directed medical therapy (GDMT). Frequent NT-proBNP-led follow-up can provide an early warning and assist with patient management.

The study enrolled patients hospitalized with acute Heart Failure who were approaching discharge but remained at elevated risk, as indicated by persistent congestion and suboptimal treatment levels. These patients represent a critical population where timely intervention can significantly alter outcomes.

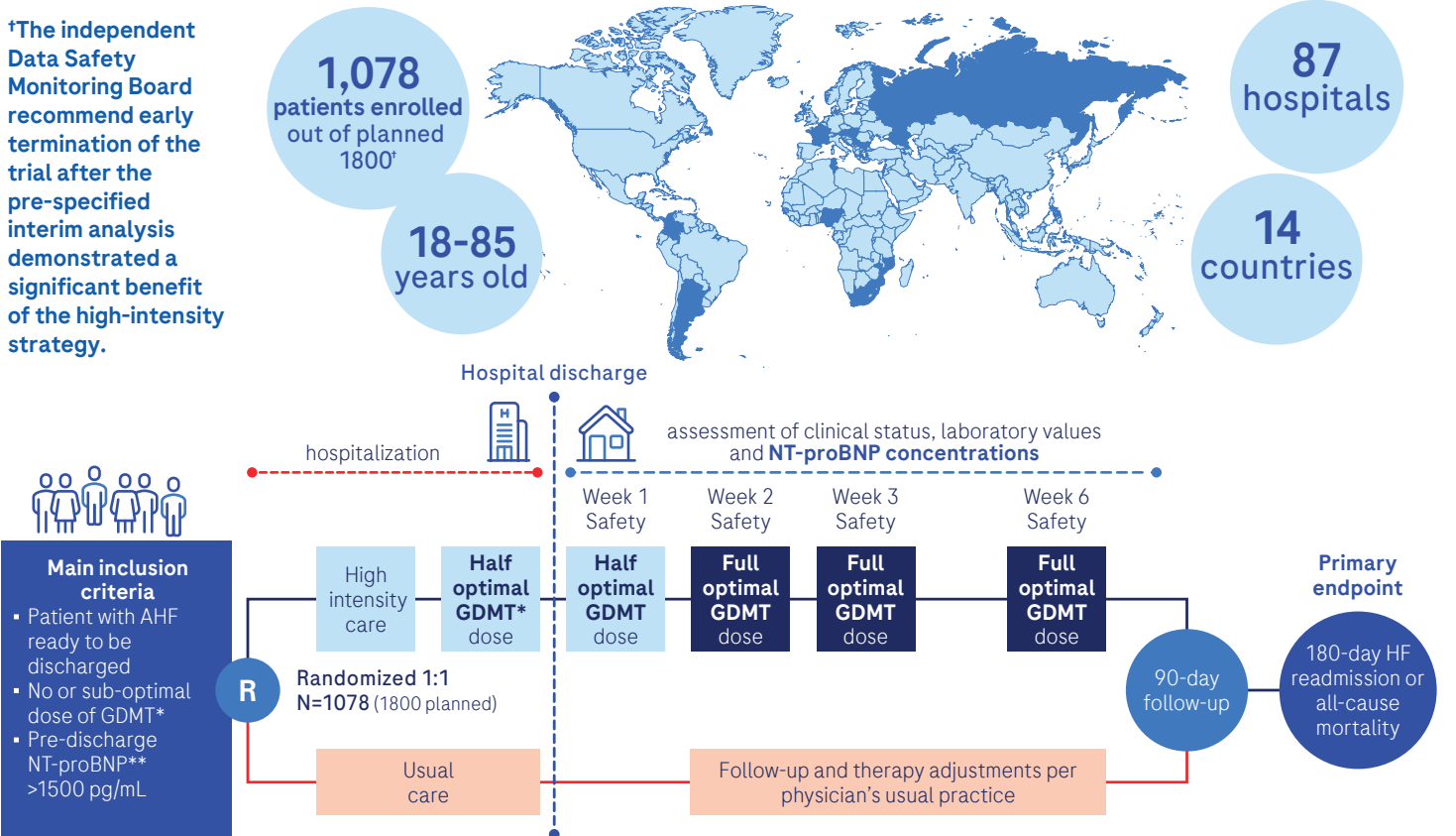
The STRONG-HF study design reflects a shift from traditional, gradual therapy adjustment to a **proactive, high-intensity care model**, characterized by:

- Early initiation of GDMT at submaximal doses prior to discharge
- Rapid up-titration to GDMT within 2 weeks
- Structured safety assessments at predefined intervals (Weeks 1, 2, 3, and 6)
- Close clinical and biomarker monitoring throughout the post-discharge period⁷

Patients receiving high-intensity care achieved full optimization of therapy significantly faster than those receiving usual care. Despite more intensive titration, serious adverse events were similar between groups.²⁶

Follow-up assessments incorporated a comprehensive evaluation of clinical status, laboratory parameters, and NT-proBNP levels, enabling timely adjustments and proactive management of deterioration risk. Outcomes were measured at both 90 and 180 days, with the primary endpoint defined as Heart Failure readmission or all-cause mortality at 180 days.⁷

This structured, time-bound approach illustrates how **protocolized care pathways and data-driven monitoring** can transform the most vulnerable phase of the patient journey into a period of controlled recovery and stabilization.



*ACEi/ARB, ARNI, BB, or MRA; **NT-proBNP criteria for persistent congestion ACEi, angiotensin-converting enzyme inhibitors; AHF, acute heart failure; ARB, angiotensin receptor blockers; BB, beta blockers; GDMT, guideline-directed medical therapy; HF, heart failure; MRA, mineralocorticoid receptor antagonists; NT-proBNP, N-terminal pro b-type natriuretic peptide

6. Customer Testimonial

“Through my participation in the Roche Early Adopter Consulting Program, our heart failure team gained valuable strategic insight into the heart failure patient journey, including key clinical, operational, and multidisciplinary challenges affecting patient care. The program facilitated effective collaboration and communication between different departments involved in heart failure management, helping our hospital develop a clearer and more structured vision for both short- and long-term heart failure services. This experience contributed to identifying practical solutions for daily clinical obstacles, improving care coordination, enhancing patient-centered management, and ultimately supporting better outcomes and quality of care for heart failure patients.”

Dr. Mohamed Farouk

Consultant Interventional Cardiologist, Kuwait

“We can intervene in a targeted way.”

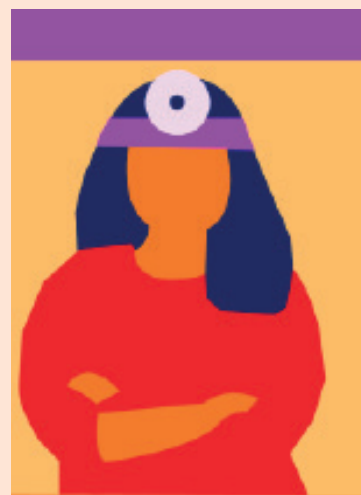
Dr. Rene Tio

Cardiologist at Catharina Hospital, Netherlands

“The STRONG-HF trial, for example, highlights that it’s feasible, it’s safe, and it gets through that patient’s high risk period where they’re more likely to not take their medications and have subsequent events and readmission. We’ve got a high readmission rate, which of course results in morbidity as well as mortality, with about 1 in 5 of our patients readmitted in 90 days. The other thing is that if we get the patients started onto a program of rapid titration, they’re more likely to engage with the service and adhere to their medication in the long term.”

Dr. Raewyn Fisher

Cardiologist, Whangārei Hospital, New Zealand



7. Call to Action

Healthcare systems today face a critical opportunity to close the persistent gap between clinical evidence and real-world practice in cardiometabolic care.¹ The post-discharge phase in Heart Failure represents both a point of elevated risk and a window for high-impact intervention. Evidence from structured care models demonstrates that organizations adopting these approaches can achieve **significant 34% risk reduction of HF readmission or all-cause mortality at 180 days and approximately 44% (180 days) and 33% (90 days) reduction in HF rehospitalisations** without increasing serious adverse events.⁷

Beyond clinical outcomes, transformation also enables significant improvements in care delivery efficiency. Guideline-directed medical therapy (GDMT) optimization, which traditionally requires **3-6 months**, can be accelerated to **2-6 weeks**, with patients achieving **≥50% of target doses at discharge** and full optimization within approximately two weeks. At the same time, standardized care pathways reduce variability through **protocolized follow-up (Weeks 1, 2, 3, and 6)** and consistent, biomarker-guided decision-making.^{14,26}

To realize these outcomes, healthcare organizations should initiate a structured transformation journey:

- **Evaluate current processes and care pathways**
Assess existing Heart Failure management approaches to identify gaps in post-discharge care, therapy optimization, and continuity across clinical settings.
- **Convene a multidisciplinary leadership team**
Align stakeholders across cardiology, internal medicine, nursing, pharmacy, and administration to establish clear governance and accountability.
- **Engage in a structured readiness assessment**
Apply implementation science frameworks to define priorities, assess organizational readiness, and address barriers to change.
- **Implement structured care pathways and pilot initiatives**
Introduce protocolized models of care that enable early follow-up, rapid GDMT optimization, and standardized safety monitoring.
- **Connect with experienced partners and global networks**
Leverage external expertise and real-world best practices to accelerate adoption and scale transformation effectively.

These coordinated actions enable healthcare systems to transition from fragmented care delivery to **integrated, protocol-driven models** that deliver measurable clinical and operational impact. In cases where internal resources or specialized expertise are limited, engaging external partners can further accelerate and de-risk the transformation process. The key outcomes of such transformation – spanning clinical impact, therapeutic acceleration, and reduced care variability – are illustrated in the figure below.



Clinical Impact⁷

- Significant 34% risk reduction of HF readmission or all-cause mortality at 180 days
- Approximately 44% (180 days) and 33% (90 days) reduction in HF rehospitalisations
- No increase in serious adverse events



Therapeutic Acceleration^{14,26}

- Faster GDMT optimization compressed from months to 2-6 weeks
- ≥50% target GDMT doses at discharge
- Full target doses within ~2 weeks



Reduced Care Variability^{14,26}

- Protocolized visit cadence (1, 2, 3, 6 weeks)
- Standardized lab and NT-proBNP-guided decision-making
- Consistent safety thresholds across providers and sites

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Published by

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6343 Rotkreuz

Switzerland

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